

# **US 29 Bus Rapid Transit Planning Board Briefing**

February 16, 2017



### **Project Goals**

- Improve the quality of transit service
- Improve mobility opportunities and choices
- Enhance quality of life
- Support master planned development
- Provide sustainable and cost-effective transit alternatives





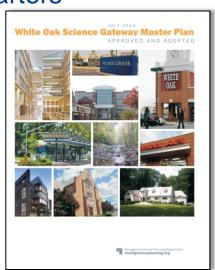
### A Snapshot of the US 29 Corridor

- One of busiest transit corridor in Maryland with over 11,000 daily bus trips
- Bus trips on the corridor average 20 percent longer than auto trips; up to 60 percent longer during peak periods
- Highly diverse
  - 65% of residents minority; 32% foreign born
  - 31% of population speaks a language other than English at home
  - 30% of households earn less than half of the area median income
  - 12% have no access to a car; 38% have access to only one vehicle
  - Home to over 9,000 senior citizens and 11,000 people with disabilities



### A Snapshot of the US 29 Corridor

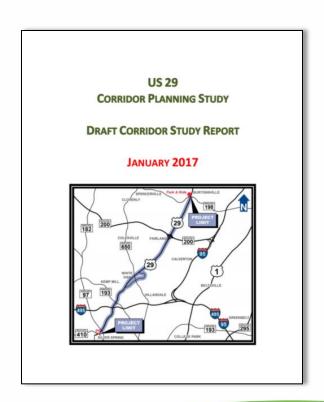
- Major job and education centers
  - Food and Drug Administration (FDA)
  - National Oceanic and Atmospheric Administration (NOAA)
  - Discovery Communications Headquarters
- 61,000 jobs along corridor in 2010; projected to over 80,000 in 2040
- Major Planned Development
  - White Oak Science Gateway
  - Downtown Silver Spring
  - Burtonsville





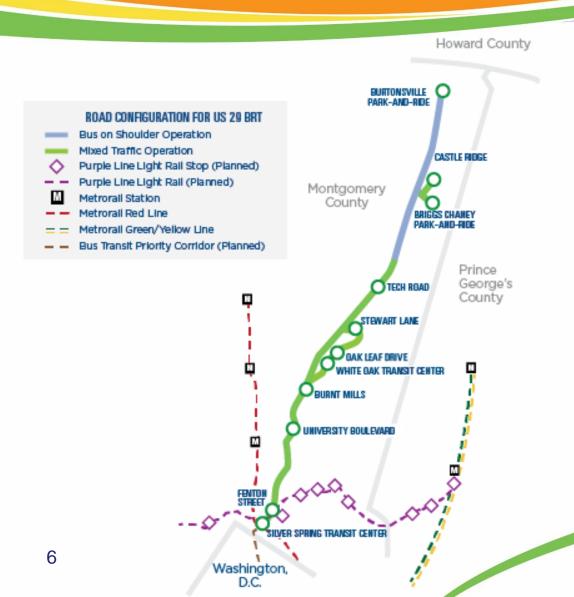
# MDOT Study Process Findings (2040 Analysis)

- Station Locations
- Service Plans
- HOV mode share
- Impacts of new pavement in north
- Traffic Analysis
- Total capital cost : \$80-140 million





### **MCDOT US 29 Project**



Approximately
40% of the
alignment along
US 29 is in
dedicated Bus on
Shoulder lanes



### **Elements of MCDOT US 29 Project**

- Frequent all-day service
  - 7 days/week
  - Same hours as Metrorail
  - 7.5 minutes peak; 15 minutes off-peak



- Transit Signal Priority (TSP)
- Bike/pedestrian improvements to facilitate station access, including 10 new bikeshare stations
- Ongoing coordination with Howard County



#### **Elements of BRT**

BRT Element		US 29 BRT Details
Runningway	1	40% in dedicated Bus on Shoulder
Stations	1	11 level-boarding BRT stations with improved amenities such as real-time info and off-board fare collection
Vehicles	1	Sleek, articulated BRT vehicles with multiple-door level boarding and interior bike accommodation
Fare Collection	1	Off-board fare collection
ITS (Technology)	1	Transit Signal Priority at 15 intersections; real-time arrival info
Service and Operations	1	Frequent, headway-based service with longer span; integration with local services
Branding	1	Uniquely branded service, stations, vehicles

"Most BRT projects operate in mixed traffic – primarily arterials streets – for 50 percent or more of their routes."

- GAO Report, 2012

Source: National BRT Institute



# **US 29 BRT Project Benefits – Ridership and Transit Reliability**

- Projected BRT Ridership
  - 2020: 13,000 daily boardings (3,950 new)
  - 2040: 20,000 daily boardings (*5,700 new*)

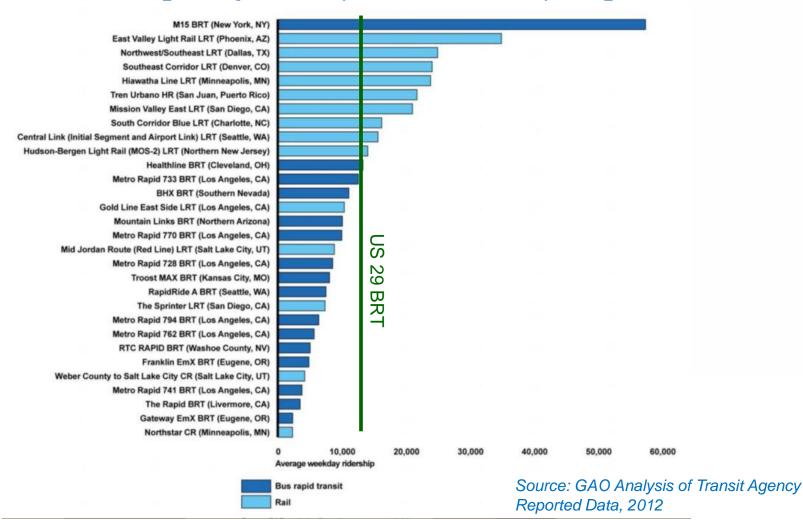
The Benefit-Cost Analysis for the US 29 BRT project shows that benefits outweigh costs by a factor of **four**.

- Improved transit reliability
  - Current on time performance for local corridor transit services averages 45-77%\*
  - US 29 BRT will improve reliability through:
    - Bus on Shoulder
    - Transit Signal Priority
    - More efficient operations (level multiple-door vehicle boarding, limited stops, off-board fare collection)

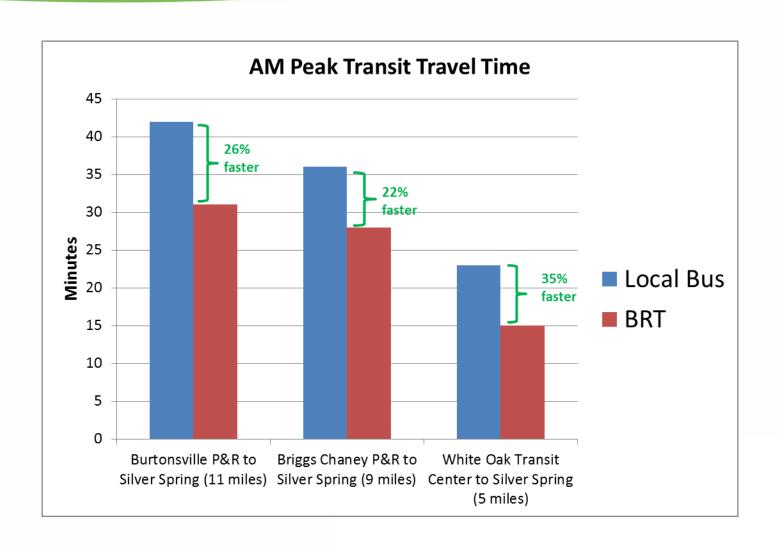


# US 29 BRT Compared to Other BRTs – Ridership

#### Average Daily Ridership One Year After Opening

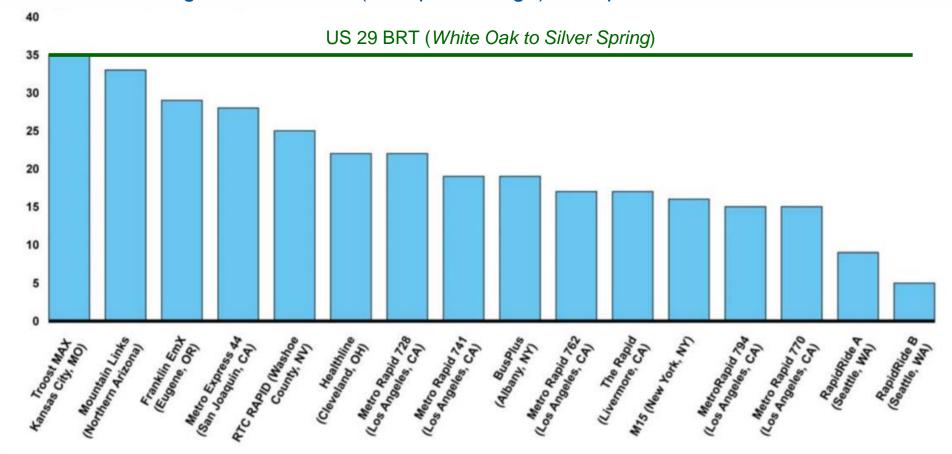


# **US 29 BRT Project Benefits – Improved Transit Travel Time**



# US 29 BRT Compared to Other BRTs – Travel Time Savings

Change in travel time (as a percentage) over previous bus service



# US 29 BRT Project Benefits – Economic Impact

- Development of the White Oak Science Gateway depends heavily upon the presence of US 29 BRT and its capacity to enhance mobility.
  - 7 million square feet of commercial space
  - > 20,000 jobs
  - 5,300 additional dwelling units
- Project estimated to result in \$269-520 million net benefit
- Estimated Operational Phase Impacts
  - 85 permanent jobs in Montgomery County
  - \$6.5 million annual labor income
  - \$13.4 million additional annual business sales.

Source: MCDOT TIGER grant application, Economic Impact Analysis, Sage Policy Group



# US 29 BRT Project Benefits – Accessibility

- Increases regional connections and access to a fast-growing jobs corridor
- US 29 BRT will improve transit access and provide upward mobility for transit-dependent populations
  - Currently minimal off-peak transit service on the corridor
  - BRT will significantly increase span and frequency of service
  - Local routes will be integrated and improved



# **US 29 BRT Project Benefits – Route Efficiency and Coverage**

- Existing local service will be evaluated to interface with BRT and potentially provide improved frequency and/or coverage into neighborhoods
- Potential strategies:
  - Adjust frequency
  - Adjust span of service
  - Relocate stops
  - Change alignments

- Extend routes
- Limited stop overlay
- Neighborhood circulators



#### **US 29 BRT Estimated Infrastructure Cost**

Project Element	Estimated Cost
BRT Stations and Stops	\$13,000,000
Transit Signal Priority	\$1,000,000
Vehicles	\$14,000,000
Bicycle & Pedestrian Improvements	\$2,000,000
Overhead & Grant Administration	\$1,500,000
TOTAL	\$31,500,000
Federal TIGER Funds	\$10,000,000
County Contribution	\$21,500,000

MCDOT anticipates that the majority of TIGER funding will be used towards station and pedestrian improvement construction

Note: County's FY17-22 budget already included \$6.5 million for US 29 BRT planning and design



#### **TIGER Grant**

- USDOT Program Transportation Investment Generating
   Economic Recovery
- \$500 million made available nationwide in FY16
- Highly competitive (3-5% of grant requests awarded)
- \$10 million Federal grant awarded for US 29 BRT
  - Award based on demonstrated benefits of project with respect to grant criteria (economic competitiveness, quality of life, environmental sustainability)
  - Tremendous opportunity for federal investment in East County
  - Provides national visibility to Montgomery County's BRT program





### **Status of TIGER grant**

- Developing positive relationship with FTA
- Grant agreement by June 2017
- Elements required to secure grant
  - Final scope of work (in progress)
  - Inclusion of project in STIP/CLRP (March 2017)
  - All local funding approved in CIP (May 2017)
  - NEPA complete (June 2017)



### **US 29 Project Schedule**





### **Public Engagement**

- Developing robust public engagement plan
- Corridor Advisory Committees

CACs will continue to meet to provide input on the project throughout project phases

Public Open Houses

Tuesday, March 7 Monday, March 13

6:30-8:30pm 7:00-9:00pm

Silver Spring Civic Center Montgomery Blair High School

Wednesday, March 15

6:30-8:30pm

White Oak Community Center



